

lermo Ebel, Director Biology Department, Colegio San Ignacio, Casilla 597, Santiago, Chile; as associate members, Mr. Robert Marks, 91 Pitt St., New York, N. Y.; Dr. Bernard A. Friedman, 2284 Nameoke Ave., Far Rockaway, N. Y.; and Mr. Jerome Metzner, 600 West 218th St., New York, N. Y.

The resignation of Mrs. Richard Fondille, 119 West 71st St., New York, N. Y., from annual membership was accepted with regret.

The death of Mr. Adolph Henning, 421 Hillside Pl., South Orange, N. J., associate member of the Club since 1939 was announced with deep regret. It was voted that a letter expressing the deep regret and sympathy of the Club be sent by the Corresponding Secretary to the surviving members of the family of Mr. Henning.

The scientific part of the program consisted of a talk by Professor M. A. Chrysler of Rutgers University on "Botanical Explorations in Costa Rica." The speaker's abstract follows:

This trip was undertaken chiefly in order to secure preserved material of the tropical fern family Gleicheniaceae. Dr. W. E. Roever was the other member of the party, and acted as photographer. After a two-week stop in Jamaica a week was spent at the laboratory on Barro Colorado Island, Canal Zone, where the excellent arrangements gave an opportunity for getting acquainted with the vegetation of low altitudes.

Proceeding to Costa Rica, the little city of San José, situated at an altitude of 3,800 feet, formed a particularly pleasant spot for headquarters during July and August, while Varra Blanca and El General were used as temporary bases. Both of these villages presented interesting examples of primitive living conditions, the first in a rather chilly dairying region at an altitude of 6,000 feet, and the other in a bean growing region at 2,200 feet. Shorter excursions were made to the crater of Volcan Poas (9,000 feet) and other localities chosen by the director of the National Museum. The astonishing epiphytic vegetation of these regions, consisting chiefly of ferns and orchids, together with clambering ericads and melastomes, was briefly described by the speaker. Specimens of a few plants from the collection of over 1,100 sheets were shown, also kodachrome views were exhibited.

The meeting adjourned at 9:30 P.M. to enjoy the tea served by the members of staff of Columbia University.

Respectfully submitted,

JOHN W. THOMSON, JR.
Recording Secretary

FIELD TRIPS OF THE CLUB

TRIP OF JANUARY 25, 1941, TO OSBORN BOTANICAL LABORATORY

Eight members visited the Osborn Botanical Laboratory at Yale University. Dr. Alexander W. Evans was our host. His comprehensive herbarium of *Cladoniae* was our objective. The abundance of material, the complete library, the kindness and competence of Dr. Evans left nothing to be desired. Be it the study of a rare or difficult species, the precise locating of a locality from which collections had been made, or the checking of identification and synonymy on early Pennsylvania collections, no request was too trivial or too great. This indeed was an ideal trip for the serious student.

JOHN A. SMALL

MARCH 14-16 TO THE MOHONK SUGAR BUSH

Eighteen people braved typically March weather and enjoyed a variety of activities. Due to continued cool weather the trees had just been tapped but there was a good run of sap on Saturday. We were able to see the whole process of making maple syrup except the final boiling. The Mohonk sugar bush is purposely operated by old-fashioned methods with sumach spiles and a large open kettle for boiling. A detailed description was given in TORREYA, May-June, 1939.

Skating, snowshoeing, coasting and skiing were all enjoyed, but to many the supper at the Log Cabin was the outstanding event. The meal was cooked in the great fireplace and eaten by candlelight. The leader's much talked of supper surprise turned out to be a fresh strawberry shortcake!

DANIEL SMILEY, JR.

TRIP OF MARCH 30, 1941

Fourteen members and friends under the leadership of Dr. John W. Shive of Rutgers University worked on the section of the Appalachian Trail located between Millbrook Road and Flatbrooksville Road in Warren-Sussex Counties, New Jersey. Brush and down trees were removed and the blazes were repainted. On the return hike a list of plants, excluding lichens, was made. Eighty

species were recorded at this season of the year. The list is filed with the field committee and it is hoped that additions may be made as others visit the trail in this area at different seasons. We have previously recorded some thirty lichen species, including forms of *Cladonia* species.

JOHN A. SMALL

TRIP OF APRIL 17 TO BOYCE THOMPSON INSTITUTE FOR PLANT
RESEARCH

Approximately thirty people arrived at the Institute at 2 o'clock. We spent from 2 to 4 going through the building and the greenhouses. We discussed a few projects in some detail and talked in general about the work at the Institute. While visiting my laboratory the group was given a demonstration of formative effects of B-naphthoxyacetic acid and samples of seedless tomatoes which were induced by this compound. In another laboratory they saw potato chips and learned that variation in color of the potato chips is usually associated with variation in content of reducing sugars. Members of the party came from Pennsylvania, New Jersey, and New York. The University of Pennsylvania was represented by Dr. E. T. Wherry and several members of the graduate school. The New Jersey College for Women was represented by Dr. Small and several others from Rutgers University. Dr. Trelease came with a group from Columbia University. The field committee was represented by Dr. James Murphy and several other members. Though the names were not recorded, the rest of the group was made up of members and associate members of the Torrey Botanical Club.

P. W. ZIMMERMAN

TRIP OF APRIL 27 TO BUSHKILL FALLS, PA.

More than thirty members of the Torrey Botanical Club gathered at Bushkill Falls on Sunday morning, April 27, to study the flora, especially the bryophytes, and to make comparisons with the data that have been assembled in this locality during the past several years (*Torreya* 40: 175-177). Mr. Nearing contributed much by discussing the lichens, some of which are not generally found, and Dr. Higinbotham identified many of the more puzzling mosses. Most of the genera and species of the bryophytes examined had been collected here in previous years, though we had not noticed

Radula obconica and *Riccardia sinuata* before; both are rather uncommon. *Lophocolea heterophylla* showed abundant sporophytes, while *Ptilidium pulcherrimum* had open capsules fuzzy with brown spores and elaters. In *Conocephalum conicum* the female receptacles extended up several inches, while *Marchantia polymorpha*, associated with *Riccardia* and *Sphagnum*, showed very numerous male receptacles and very few of their feminine counterparts. In *Reboulia hemispherica*, which grows abundantly close to the Falls, the receptacles were just developing. The bases of the trees in a swamp north of the Falls are especially favorable for the growth of *Thelia hirtella*, and this moss was dotted with sporophytes showing the immaculate white peristomes. *Dicranum fulvum* (in "fruit"), *D. scoparium*, and *D. undulatum* were all growing close together.

The warm days of recent weeks were reflected in the flowering of some of the seed plants, so that the Shadbush was well along; the Gold Thread, *Coptis trifolia*, added a touch of color to the marshes with its greenish white flowers; while the Fringed Milkwort, *Polygala paucifolia*, showed buds that were nearly open and in a few instances flowers that had actually expanded. It is of course difficult to make comparisons in phenology even from written records, but most of us felt that these flowering plants were distinctly farther along than they were at the time of the trip of last year, which was held on April 28. Apparently we are getting back to the warm, dry part of our climatic cycle.

EDWIN B. MATZKE

TRIP OF MAY 4, 1941, TO CHESTER, N. Y.

This trip was originally scheduled to visit the colony of *Cetraria islandica* on Hogencamp Mountain in Palisades Interstate Park near Arden, N. Y. Due to the fire hazard, however, the Governor had declared all state parks closed. A group of twelve members and friends turned up at the Arden station so the group went by automobile to a region near Chester, Orange County, N. Y., where Mr. G. G. Nearing had previously collected lichens.

Here, on Goat Hill, an outcropping of calcareous shale yielded a number of crustose lichens which were collected for further study. Species such as *Acarospora fuscata*, *Rhizocarpon petraeum* var. *confervoides*, and *Urceolaria scruposa* were common. A yellow,

powdery, sterile thallus on the underside of almost every stone in the base of an old wall was puzzling until apothecia were discovered by Mr. James McGrath. Mr. Nearing later determined this crustose lichen to be *Lecidea lucida*. A number of *Cladonias* were collected on this hillside, including *C. cristatella* ffs. *vestita* and *abbreviata*, *C. mitrula* f. *imbricatula*, *C. chlorophaea* f. *simplex*, *C. delicata* f. *quercina*, *C. pleurota*, *C. furcata*, *C. Floerkeana*, *C. rangiferina* and *C. coniocraea*.

After lunch, the party moved on to climb Sugarloaf Mountain, a crystalline rock hill. On the rocks *Cladonia pyxidata*, *C. uncialis*, *Stereocaulon paschale* and *Lecanora rubina* were collected. Along the trail up, a tree yielded an abundance of *Physcia tribacia* in fruit, *P. endochrysea*, and *P. stellaris*. More of the unusual *Lecidea lucida* was found on the walls of the old roadway on the way up. It was fruiting in greater abundance than on Goat Hill but was difficult to collect as it chose to grow in the darker crannies in the bottom of the wall. The best find of the day was made by Dr. M. L. Massey. On the way up the southwestern slope of the hill she found a colony of the "Iceland Moss," *Cetraria islandica*. When further search of the slope was made, the colony was found to be of large size and the plants luxuriant, with broad lobes. It is not likely to be much disturbed as it is off the regular trail by which hikers ascend the southern face of the hill. This find adds a new station to the scanty records of this interesting lichen in the range of the Torrey Botanical Club.

J. W. THOMSON, JR.

TRIP OF MAY 16-18 TO BRANCHVILLE, N. J.

The Sixteenth Annual Nature Conference of the Club at Branchville, N. J., was held May 16-18, 1941. Mr. Wallace M. Husk, manager of the hotel, "The Pines," made the arrangements and was host. At least one hundred persons were present. More than ninety registered at the hotel and others stopped nearby or came for only one or two of the walks.

The leaders were Dr. J. M. Johnson in charge of the bird walks, William Hassler who led trips for the study of reptiles and amphibians, Dr. John W. Thomson in charge of lichens and liverworts, W. H. Dole who conducted trips for ferns and the writer who led hikes for the study of trees, shrubs, and flowering plants. Insects

and other objects of nature came in for attention when interesting species were found.

On Friday evening, May 16, the writer gave an illustrated talk on "Snapshots About the Pines," showing pictures of animal and plant life that he had taken on previous nature conferences. On the evening of May 17, Dr. J. M. Johnson lectured on "Mammals of the Rocky Mountain Region," illustrated with slides made from his own photographs. This was followed by movie reels of animal life made and shown by Mr. Hassler.

About eighty persons took part in the various bird hikes and eighty-nine species were observed. Two of these were new to the region, a White-winged Scoter and a Glossy Ibis. The latter bird, far out of its range, was observed by several good bird students at close range and Dr. Johnson believes there is little doubt as to the correctness of the identification. All observations were made within ten miles of Branchville. A pair of Pileated Woodpeckers were observed at their nest, and a pair of Great Blue Herons were constructing a nest and a pair of Florida Gallinules were observed at close range.

Mr. Hassler's walks were much enjoyed, especially by teachers of biology. He put up an exhibit of live animals, chiefly reptiles and amphibians that were collected on the trips around Branchville. Dr. Thomson also assembled an interesting exhibit of lichens collected by his groups. These labeled specimens were studied at odd moments.

An aggregate of sixty or more members and guests took part in the three fern hikes led by Mr. Dole. Thirty-two species of ferns were observed. Among the ferns found, the Smooth Cliff-brake, *Pellea glabella*, and the Narrow-leaf Spleenwort, *Diplazium pycnocarpon*, are comparatively rare in New Jersey.

While this is marked the "Sixteenth" Annual Nature Conference held at Branchville, N. J., it is really the seventeenth. The first was held May 14-16, 1925, with Dr. H. A. Gleason of the New York Botanical Gardens and the writer as leaders. About twenty-five persons were in attendance at the first meeting. There have been held sixteen annual nature conferences since that time. Certain changes have taken place in the plant life since the first meeting. Some species have increased in numbers, others have decreased and a few have apparently disappeared. Occasionally a